

\*\*\*\*\*

PRO/FILE 2068

\*\*\*\*\*

by  
Thomas B. Woods

machine language  
information storage  
and retrieval

for the  
TIMEX SINCLAIR 2068 COMPUTER

(c) 1984  
Thomas B. Woods

## HOW TO USE PRO/FILE 2068

PRO/FILE 2068 is an easy to use program. Instructions displayed on the TV screen guide you through the steps necessary to work out your own highly personalized filing system. These instructions clarify and amplify the program's many operating modes to help you get the most out of PRO/FILE 2068's file management capabilities.

### LOADING FROM THE CASSETTE

PRO/FILE 2068 is loaded like any other program. Make sure the computer-recorder connections are good. Volume should be about three quarters maximum. If your recorder has a tone control, adjust it so that bass is set at a minimum. Power up the computer and type:

LOAD "pro/file"      or      LOAD " "

Turn the recorder on and press ENTER. Loading time is about 1.5 minutes. If you have problems loading, refer to your owner's manual for recorder/computer adjustments. After about 12 seconds the name of the program will appear. In a few more seconds the loading title will be printed with the instructions "PLEASE WAIT". In a minute the program will be loaded into the computer. New instructions printed at the bottom of the screen ask you to:

PRESS "C" TO CREATE A NEW FILE  
or "L" TO LOAD AN EXISTING ONE

In the lower left corner will be a blinking "L" cursor. BEFORE STARTING ANYTHING, press CAPS SHIFT and "2" to lock on capital letters. PRO/FILE 2068 reads commands only in capital letters and it is easiest to keep the capitals locked on throughout the program. If you do want to use lower case letters, be sure to shift to capitals for commands. You can either lock onto capitals by pressing CAPS SHIFT and "2" or simultaneously press the desired key and CAPS SHIFT to capitalize just that key. Anyway, enter a capital "C" to CREATE and you are ready to go.

### CREATING A NEW FILE

Since you don't have any existing files to load yet, begin by creating a new one. This you just did by pressing "C" and ENTER. You are then asked to enter a name for this file. This will be the name that you save the file under and the name that is used to locate the file later when loading. Choose any name that will define the file like:

JUNE SALES, or PHONE LIST, or ADDRESSES

Names can be up to ten characters in length. Type in this name and ENTER. The screen clears and the computer brings you to the Main PRO/FILE Menu, one with which you shall become very familiar.



## THE MAIN MENU

Within the title block are the instructions:

SEPARATE MULTI WORD COMMANDS WITH  
THE TOKEN "AND"

This token is obtained by typing SYMBOL SHIFT and "Y". More about this later.  
Below this are four lines which tell you the condition of your present file.

OPEN tells you how much space remains open for adding new information. You start with 28000 bytes or characters and as you add data, the space open decreases. Keep your eye on this number. If you try to add more files than there is space remaining, the computer will go berserk! DO NOT EXCEED THE SPACE AVAILABLE LISTED IN "OPEN"!

FILE is the name of the file you just entered.

ORDER represents the line number of a particular group of files which forms the basis of alphabetized or numerically ordered file displays when using the AUTOSEARCH option.

FORMAT defines the portion of a file that gets printed. PRO/FILE 2068 is designed to work with the Timex 2040 printer or any printer interface which uses the Basic Lprint command.

This portion of the Main Menu gives you instant access to the current state of the program. At any time you can reference how much space is open for new information, the name of the file currently loaded, and the order and print format. Similarly, these "status" indicators are always open for change.

## COMMAND OPTIONS FROM THE MAIN MENU

The next four lines on the Main Menu give five function options. Enter:

"A" to ADD a new file to the program

"SAVE" to allow you to SAVE updated files on tape

"LOAD" to LOAD existing files from tape

"AUTO" to produce AUTOMATIC printouts, and numerically or alphabetically ordered displays of information.

"DEFP" to DEFINE PRINTER format. With this command you specify which lines of a file get printed.

These commands will each be covered in more detail later. At the bottom of the Main Menu is the phrase "SEARCH COMMAND?" followed by a blinking cursor. After data has been added to the program, you can enter "Search Commands" to access the information from those files. At this point, anything you enter except the above five commands is interpreted as a "Search Command".

## ADDING FILES

With the Main Menu on the screen, type "A", then ENTER. The TV screen will clear and at the top left you'll find a blinking ADD/EDIT cursor. The computer is now waiting for you to start entering data. At the bottom of the screen is a box listing various cursor controls and editing functions. You should think of the computer in the ADD/EDIT mode as being just like a typewriter with the TV screen as the sheet of paper you're typing on. The blinking cursor tells you where the next key you press will be printed.

For practice, type in a name such as STEPHEN PAGE. Press ENTER. Touching the ENTER key moves the cursor to the next line. Type in 7 SUMMER STREET. Press ENTER again. Type ROCKPORT, MAINE and ENTER. Type 04856. ENTER. Type 207 236 3659. ENTER. Now you have five lines of information and the beginnings of a file. With this practice file, or any other, try some of the editing commands.

The arrows (shifted 5, 6, 7, and 8) move the cursor at will. You can position the ADD/EDIT cursor anywhere on the screen using the arrows and start typing from a new position.

Press SHIFT and "I" to alternate between the INSERT mode and the OVER mode. When the computer is in INSERT mode, whatever characters you type will be inserted between existing text on the line you're working on. In the OVER mode, the computer replaces (or types over) whatever is on the screen with what you type. You can tell which mode you're in by looking at the color of the ADD/EDIT cursor.

- a YELLOW cursor means you're in the OVER mode
- a WHITE cursor means the INSERT mode is activated

Try putting the computer in INSERT (white cursor) and move the cursor up to the "R" in ROCKPORT. Then type a "B". The "R" moves one space to the right and ROCKPORT becomes BROCKPORT. To get out of this mode press SHIFT and I again. The cursor changes back to yellow and you return to the OVER mode.

SHIFT Ø is used to delete a character. Move the cursor to the "B" in BROCKPORT and press SHIFT Ø. The "B" is deleted and every character on the line is moved left.

Now press SHIFT 9 and some more options will be displayed.

SHIFT 2 is the capital letters lock, for shifting in or out of CAPS. If you are typing in lower case, the regular CAPS SHIFT key still works in the normal fashion, but to lock onto upper case, press SHIFT 2. When you do, you will see the cursor briefly change to a blue color and a ">" symbol will blink in its place. This tells you the computer has gone into upper case. Everything you type will be locked in CAPS. If you press SHIFT 2 again, the "<" symbol is flashed in blue. Now the machine is back in lower case only.

SHIFT 3 deletes an entire line from the file you're working on. Every line which appears below the line the cursor is blinking on will move up one position to fill the void left by the deleted line.



The next command, SHIFT 4, means LINE ERASE. Here a line can be deleted, but lines which follow will not move. The blank space remains. Also, only a portion of the line will be blanked out, that being everything to the right of the cursor. Text on the same line, but appearing to the cursor's left will remain. Therefore, an entire line could be erased if the cursor is in the left most column, but if it is somewhere in the middle of a line, only part of it is blanked out.

Simultaneously pressing the SHIFT and SYMBOL SHIFT keys causes the computer to INSERT a line. This is just the opposite of the line delete function. Every line from the ADD/EDIT cursor and below is shifted down one space and a blank line is INSERTED on which you can type new information. It is important to note that if the bottom line has any text written on it, executing the LINE INSERT command will shift everything down and what was on the last line is lost and cannot be recovered.

SHIFT 9, as before, is used to change the ADD/EDIT MENU. When you press it this time the current status of the program (OPEN, FILE, FORMAT, etc.) is displayed. Press SHIFT 9 again to return to the first set of commands.

There are fifteen lines available for adding information to the file. Additions and changes can be made anytime the file is on the screen.

To CLOSE the file and add it to the memory, press STOP (SYMBOL SHIFT and "A"). The file is stored and the Main Menu returns to the screen. Note that the number of bytes OPEN has decreased by the amount used in the file you just added.

Continue to ADD files this way and use the commands to edit them. Note that any edit command will work while in the ADD/EDIT mode even if it is not currently displayed on the screen.

## THE SEARCH COMMAND--YOUR ACCESS TO FILES

Once you have some files in the memory, you can access them by typing in any word, group of letters, or group of numbers in that file. For example, with the practice file noted previously, the Search Command could be STEPHEN or PAGE or ROCKPORT or 04856 or 207 or STEPH or any combination or group of characters. With the Main Menu on the screen, type in a Search Command that you wish. Press ENTER and every file that contains that group of characters will appear on the screen. The computer displays the first matching file it finds and prints at the bottom of the screen a box listing what are called the "Display Options".

## THE DISPLAY OPTION MENU

After a file has been retrieved and printed on the screen, there are several things you can do. These options are executed by pressing one of several keys. These are the options you have:

ENTER will search through more files and find other matches to the Search Command. If, for example, you use PRO/FILE 2068 as an address list and you have several people named PAGE listed, you could type PAGE as a Search Command and the computer

would find and print the first file it found that had the word PAGE in it. The machine has no way of knowing if the file it finds is indeed the one you want. Perhaps it was the second or third PAGE you wanted to look up. If you press just ENTER of the Display options, the program picks up where it left off and CONTINUES searching. You can press ENTER after every file display to "step" through every listing which has the Search Command you input. Searching continues through every file until all your data has been checked. Then the computer prints, "SEARCH IS COMPLETE". This tells you there is no more data to check and some other Display Option should be selected.

"C" chosen as an option will COPY the file printed on the TV onto a printer if you have one attached. The Print Format as defined by DEFP controls just which lines actually get printed. More on DEFP later.

"D" will DELETE the file currently displayed from memory. Once done, the computer returns to the Main Menu.

"E" shifts into the EDIT mode. The ADD/EDIT menu will be displayed at the bottom of the screen and the flashing cursor is activated. The editing procedure is identical to that of adding a new file only the EDIT mode starts with the currently displayed file already printed on the screen.

"M" prints four MORE Display Options. When you press "M" you see these:

"R" will start the search again from the beginning, looking for the Search Command displayed. If after looking through your mail list of 6 different people named PAGE, you decide it was the first one you really wanted, you could press "R" to RETURN to the first one again. Select ENTER to look for the next file, "R" to RETURN to the first.

"A" puts the ADD mode ready to take a new file. This is the same as if you type "A" from the Main Menu.

From the Display Options you can also enter most "Main Menu" commands. A SEARCH COMMAND of any kind can be typed in at this time to look for another file.

SAVE, LOAD, and DEFP can be typed in to alter update files on tape, load another file, or alter the Print Format. (AUTO must be started from the Main Menu)

"M" typed a second time will display the "status" of the program as in the Main Menu: OPEN, FILE, ORDER, FORMAT, etc.

## MULTI-WORD SEARCHES

Sometimes you will want to use two or more variables in locating a file. For example, find all people named PAGE who live in ROCKPORT. This kind of search is called a Multi-word Search. PRO/FILE 2068 can find files on the basis of two or even more



separate and distinct words. Only those files that contain every word will be displayed. For a Multi-word Search Command, type the first word such as PAGE, the token "AND". This is accomplished by pressing both the SYMBOL SHIFT and the "Y" keys at the same time. Type a second word like ROCKPORT. Other variables may be added, separated by "AND". In this case only the files containing both the words PAGE and ROCKPORT will be displayed.

Note that the token "AND" must be used--typing the letters A, N, and D is not the same thing. You have 32 characters for a Search Command. As long as you're within this limit, you can hunt for as many different words as you like. There is one situation you should watch out for and this can best be illustrated by taking another look at the practice file:

STEPHEN PAGE  
7 SUMMER ST.  
ROCKPORT, ME  
04856  
207 236 3659

Search Commands like "PAGE AND ME", or "STEPHEN AND 04856 AND ROCKPORT" will put this practice file on the TV screen, but "PAGE AND 3659" will not. In the case of multi-word searches, when the last word of the search command is also found in the last word of a file, the computer will not display the file. On the other hand, a search for "3659 AND PAGE" will find it. As you create files, it is important to remember this or the program may produce some unexpected results. Solutions which insure that this event will never occur include:

- Before closing a newly added or edited file, add a special character like a period or underline (SYMBOL SHIFT-Ø) to the end of each file. Then, as long as you don't try to search for this character, the computer won't lie to you when you tell it to give you a file display.

- Another alternative centers around the manner in which you set up your files. If you always put the data you'll use to search by at the beginning of a file, and keep other info at the end, this inaccuracy will never come back to haunt you.

- Finally, if you use the end of a file to signify a special meaning or category of a file and every file thus uses this same file position to store the same type of information, you can use the data held there as a search word, but it must always be used as the first word in a multi-word search.

All in all, this unusual situation will probably never occur in your data base. If it does, you now know what is going on and how to fix it. You should not let this (choke) "bug" deter you from using the multi-word search. The potential power of a 5 or 6 word Search Command is enormous.

#### PRINT FORMAT and DEFP

DEFP can be reached from the Main Menu or from the Display Options. Typing in this command will give you a display that asks you to ENTER DESIRED FORMAT. It is here that you tell the computer just which lines you want to print when you use a printer. To print the entire file, type "ALL". To print part of a file, list the

line numbers you want to print and separate each with a "/". Any combination will work. You can tell the printer to print blank lines by inserting a "Ø" in place of a line number. For example, the format 1/2/3/Ø/6/Ø/5 would print out lines 1, 2, and 3; followed by a blank line; then line 6; another blank line, then line 5.

Once you define the PRINT FORMAT, it will be displayed on the "status" chart of the Main Menu for easy reference. A status report is also available from the Display Options and the ADD/EDIT menu.

## AUTOSEARCH

Automatic searching allows you to 1) print out more than one file at a time; and 2) arrange the files so they are displayed or printed in alphabetical or numerical order. Therefore it is possible to alphabetize an index or address list, or to order numerically zip codes for bulk mailing, or countless other uses.

To use this function, type AUTO from the Main Menu. The display asks: PRINT OUT? (Y/N). Enter "Y" if you want all files to go to the printer. Press "N" or any key except "Y" and the data is displayed only on the TV screen.

Next type in a Search Command. If you press just enter you will leave the AUTO mode and return to the Main Menu.

Now you are asked to type in a line number. This will be the basis for ordering. For example, if line 5 always holds a zip code, and you want the files sorted by zip, you would type in "5". If you want an alphabetical ordering of names listed on the first line of every file, you would type in number 1.

You can tell the computer that you don't want the files ordered. When the program asks for a line number, type in a "Ø". You'll then get a readout of all the files containing the search command as they are found rather than in any particular order.

After typing in the line number, press ENTER, and the computer will scan all the files automatically, printing the file that comes first in the sequence you have chosen. If you chose printer output, the ordering progresses until all files are printed. When TV display only is selected each file is displayed in turn with the Display Options. Continue to press ENTER to order all the specified files.

## THE ASTERISK--A SPECIAL SEARCH COMMAND

Although you never see it, PRO/FILE 2068 begins every file with the asterisk (\*). Because of this, the "\*" becomes a useful tool for listing all the files in memory. Type in a "\*" as a Search Command and every file will be displayed or printed.

You can also use the asterisk while adding and editing files to fool the computer into thinking there are two separate files on the screen. When a file becomes large and you feel it might be better to "split" it into two different ones, insert a "\*" at the appropriate place. The next time you look the file up, you'll find that what once was one file, now is two.



## SAVING FILES

As you create files, add to them and edit them, you should save the files on tape often. Every time the computer is shut off the new material in the memory is lost. Fortunately it is easy to SAVE your programs and files. Use a new tape in the recorder and start it recording. Then type SAVE from the Main Menu and press ENTER. Be sure the cables are connected between the recorder and computer. The normal SAVE pattern will appear on the screen, and when SAVEing is complete, you will return to the Main Menu.

## LOADING YOUR SAVED FILES

When you are newly loading PRO/FILE 2068, you given the choice to press "C" to CREATE a new file, or "L" to LOAD an existing one. This is one time that you can load the files you have stored on tape. Otherwise, type LOAD from the Main Menu. You will be asked to type in the name of the file you want. Enter this name, and press PLAY on the recorder. The file you choose will be loaded into the computer.

THERE IS MUCH MUCH MORE . . . . . and its FREE!

These instructions were meant to provide just the bare essentials to help you get PRO/FILE 2068 up and running. A 100 page manual is being prepared to give useful tips on how to use the program for many different applications plus explain in detail exactly how the program works--both the BASIC and the machine code.

This book will prove to be a valuable extension to the program. Because you purchased PRO/FILE 2068, you can get the book FREE, but you must return this coupon. As soon as the manual is complete it will be on its way to everyone who sends in this form. Don't miss out. Send it now before you forget.

Also, to make the PRO/FILE 2068 book the best that it can possibly be, useful applications are being sought. If you find a job for PRO/FILE 2068, send a description of your discovery. Share your techniques with others.

## ACKNOWLEDGMENTS

Special thanks go to Stephen Page (yes, he really is more than just a practice file) who wrote the bulk of these instructions.

Also, thanks go to you for faithful support in uncertain times. Many times it is said that "third parties provide support to users". Instead it is the other way around. Without your "support", this program would never have been written.